

DOUBLE DE-MOTIVATION AND INTRINSIC MOTIVATION AMONG TEACHERS IN INDONESIA

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ABSTRACT

The “double de-motivation” hypothesis (Carr & MacLachlan, 1993/4; MacLachlan & Carr, 1993) has empirically been established by recent studies (e.g., Carr et al., 1996; McLoughlin & Carr, 1997), however, the other motivational effects on organizational dynamics that this phenomenon symbiosis with has not been explored. One principal human factor that has direct link to double de-motivation is intrinsic motivation. Therefore, this study was conducted to investigate the double de-motivation hypothesis and intrinsic motivation among English teachers in Indonesia. A total of 188 participants responded to Carr et al’s (1996) pay and job satisfaction scale and Morse and Weiss’s (1955) Lottery Questionnaire (LQ). Based on pay differential criteria derived from the first segment of pay and job satisfaction scale, expatriate and local teachers were classified into underpaid (n = 66, local teachers), overpaid (n = 60, expatriate teachers), and equitable paid (n = 62, local and expatriate teachers) groups. On the basis of theoretical and literature review of double de-motivation and intrinsic motivation, two hypotheses emerged in this study. First, to replicate double de-motivation, it was predicted that the underpaid and overpaid groups will be de-motivated, thus experiencing double de-motivation as compared with the equitable paid group. The results supported the hypothesis and showed distinctively that the underpaid and overpaid groups were significantly less satisfied or de-motivated than equitable paid group, thus confirming the existence of double de-motivation. Second, it was predicted that the underpaid and overpaid groups will possess less intrinsic motivation as compared to the equitable paid group. The results revealed that both the underpaid and overpaid groups possessed significantly lower level of intrinsic motivation than equitable paid group. The findings are discussed in relation to organisational management for inequity in salary, and the shortcoming of the study is highlighted with a concluding recommendation.

Key words: *double de-motivation, inequity, intrinsic motivation*

INTRODUCTION

In developing countries like Indonesia, inequity in salary at many workplaces among workers are evident. Organisations advocating for such pay policy do observed it as a psychological and management technique of attracting different skilled workers and maintaining their motivation at optimal level. However, such policy is paradoxical in nature that workers evaluating such inconsistency in salary react also adversely within that context (Carr et al., 1996). One stark example is the specific reaction of workers doing the same job, but paid differently called “double de-motivation” proposed by Carr and MacLachlan (1993/94) that exists in workplace where pay discrepancies are evident (MacLachlan & Carr, 1993). Double de-motivation is purely seen as a negative reaction resulting from inequity in salary between workers in the same workplace. Specifically, double de-motivation is defined in the context of workers performing the same task, with the same qualification, and are paid differently; one group higher than the other, and thus both groups become de-motivated as compared to an equitable paid group (MacLachlan & Carr, 1993; Carr et al., 1996). This phenomenon was originally and empirically observed between expatriate and local workers performing the same job and within the same organisation, in which, the expatriates were found to be overpaid and locals underpaid (see, Carr et al., 1996; MacLachlan & Carr, 1993). Double de-motivation can also directly affect other specific motivational aspect of workers who are dissatisfied with pay inequity, and therefore, this study extends this line of research to other work

motivational typology. Hence, double de-motivation is a real threat and counter-productive to employees’ work motivation in this era of globalisation where exchange and flow of human resources from country to country will intensify.

Double de-motivation and Intrinsic Motivation: Theoretical and Literature Review

Double de-motivation does not exists in isolation, and therefore can be conceptualised within the tenet of certain human factor model of social psychology theoretical underpinnings. Several social psychological theories which include cognitive dissonance theory (Festinger, 1957), and equity theory (Adams, 1965) have provided the rationale of double de-motivation hypothesis according to Carr et al. (1996). Within the main framework of Festinger’s (1957) theory, he proposed that if an individual was induced to say or do something that was in conflict with private opinion, then there would be a tendency for him or her to change his or her opinion so as to bring it into agreement with what he or she had said or done. The tension arising from the perceived discrepancies between one’s beliefs and knowledge of what had been done or said is defined as cognitive dissonance according to Festinger (1957). Several classical studies (e.g., Brehm & Cohen, 1962; Festinger & Carlsmith, 1959) have empirically confirmed this process of attitude change, thus supporting the theory of cognitive dissonance. Following the principles of cognitive dissonance theory (Festinger, 1957) and practically relating to workplace behaviour in explaining double de-motivation dynamics, the overpaid expatriate worker who believes in equality

observes that his or her local counterpart doing the same job is underpaid may try to rationalise and justify cognitively by distorting his or her cognitions (e.g., "He/She is lazier and I am hard worker", or "He/She is stupid and I am clever") to explain the inequality or else behaviourally, distance themselves from the local workers and identify with their foreign colleagues (Carr et al., 1995). Similarly, the local underpaid worker may do the same cognitively in a reverse way (e.g., "He/She works harder and I am lazier", or "He/She is clever and I am stupid"), and behaviourally in the same way, identify himself or herself with his or her local colleagues.

Adams's (1965) equity theory relates Festinger's (1957) theory of cognitive dissonance specifically to the work environment. The psychological dynamics of the equity theory is premised on the notion that individuals normally judge the equity consistency of their workplace by comparing their own inputs and outcomes with the inputs and outcomes of other (Adams, 1965). The process equation of the theory predicts that firstly, individuals will seek equitable relationships, secondly, experience distress if they perceive themselves to be in an inequitable relationship, and lastly, attempt to restore equity which can be manifested through both psychological and physical methods (Aamodt, 1991; Carrell & Ditttrich, 1978; Lawler, Koplin, Young, & Fadem, 1968). Within the terms of this theory, the inputs relate to qualification, expertise, knowledge, and experience that the worker possesses. The outcomes concern the benefits and rewards an employee receives from a job such as salary, recognition, job

security, superannuation, health insurance, status, promotion, commission, work space, satisfaction, and companionship (Aamodt, 1991; Adams, 1965; Greenberg, 1988). For instance, if employees perceive that their outcomes exceeded by their inputs, they may attempt to restore equity by lowering their productivity, stealing office supplies, absenteeism, or by convincing themselves that they did not deserve a higher outcome (Aamodt, 1991). On the same token, if an employee believed a colleague was receiving more positive outcomes than themselves for completing the same work, they can attempt to reach equity either by sabotaging their fellow employee's work or by cognitively convincing themselves that their colleague works harder (Lawler et al., 1968). Another behavioural response is for the concerned worker to move out of the jobs or in Adams's terms 'leaving the field'. Hence, in general, an equitable workplace has been shown to have negative impacts on employees (Austin & Walster, 1974; Carr et al., 1996; Carr & MacLachlan, 1993/94; Wong, 1996).

Several studies (e.g., Carr et al., 1996; Carr & McLoughlin, 1997) have utilised the cognitive dissonance theory and equity theory as basis for investigating the double de-motivation hypothesis. In a robust study, Carr et al. (1996) empirically confirmed the existence of double de-motivation among a wider sample of Australian workers, thus extending the external validity of this construct to another cultural setting in which its original observation was in Africa (Carr & MacLachlan, 1993/4; MacLachlan & Carr, 1993). Although double de-motivation exists in developing countries, the recent finding by Carr et al. (1996) revealed its

significance in a developed country. Therefore, the universal existence of double de-motivation is evident, especially, in situation of pay inequity among workers possessing same qualification and working at the same level.

Within the domain of personality, double de-motivation has been linked to equity sensitivity (McLoughlin & Carr, 1997). In McLoughlin and Carr's (1997) laboratory study, they found that subjects who are classified as Equity Sensitives were de-motivated in situation of pay inequity as compared to Benevolents and Entitleds. This finding directly implies that workers who are sensitive to equity are prone to de-motivation if the organisation pays its workers inequitably.

On record, there are few studies on double de-motivation, and to date, scant research has been conducted to extend the double de-motivation hypothesis to other related psychological constructs that involves human psychology at workplace. Since the process of de-motivation in general involves psychological reactions from the workers, a possible implication would be its impact on employees' work motivation. One well investigated construct is intrinsic motivation, and therefore the symbiosis of double de-motivation with this particular work motivation seems inevitable.

Intrinsic motivation is operationally defined as behaviours that are executed in the absence of any external contingency or specifically extrinsic rewards such as money (Deci, 1975; Deci, 1971). Behaviours that are intrinsically motivated are driven by a fundamental need to fulfil one's potentialities (Maslow, 1943), to investigate, explore and master ones

environment (Alderfer, 1972), to seek responsibility (Mc Gregor, 1960) and to achieve success (McClelland, 1961). Intrinsic motivation was first shown to be decreased by extrinsic reward in a classical study conducted by Deci (1971).

In two sessions, subjects in both experimental and control groups were asked to solve a series of interesting and novel puzzles, in which Deci (1971) manipulated various extrinsic reward conditions to measure their subsequent effect on intrinsic motivation. After the first session, subject in both groups were led to believe that the experiment had finished to enable the researcher to leave the room to perform some calculations, leaving the subject nothing to do until they returned. Issues of recent magazines and newspapers were left in the room along with the puzzle to provide subject with a choice of how to fill their waiting time. Hence, during this 'free choice' period, intrinsic motivation was measured through a one way mirror by recording the length of time subjects voluntarily interacted with the puzzle. At the end of the session subjects in the experimental group were financially rewarded for their participation. In the second session, experimental subjects were informed that they would receive no financial reward for interacting with the task. Once again, after the session was finished and the experimenter had left the room, intrinsic motivation was measured by the time the subject interacted with the puzzle during the free choice period. The results revealed that subjects who were extrinsically rewarded (experimental group) interacted with the puzzle during free choice period significantly less than those subjects who

received no financial reward (control group). Thus, motivation had been eroded by providing subjects a financial reward for their effort. Deci (1975) further explained his findings by developing a theory of cognitive evaluation.

Cognitive evaluation theory is built on the assumption that an individual's level of intrinsic motivation is determined by their feelings of competency and perceived locus of causality (Deci, 1975). In line with the previously mentioned study, Deci (1975) reasoned that subjects who has received financial reward for engaging in the task attributed their behaviour to an external source (being paid money), so that when the reward was removed for the second session these subjects spent less time interacting with the task. Thus when an individual perceives that their behaviour is under external control rather than internal control, intrinsic motivation is decreased (Deci, 1975; Wiersma, 1992). This shift in perceived locus of causality from internal to external result in a decrease in self determination as subjects rationalize that the external mediator induced their behaviour and not themselves.

In fact, a wide range of studies in both field and laboratory have since replicated Deci's (1971) study, further supporting his cognitive evaluation theory (Daniel & Esser, 1980; Deci & Ryan, 1980; Greene & Lepper, 1974; Jordan, 1986; McGraw & Fiala, 1982; Pritchard, Campbell, & Campbell, 1977; Ross, 1975; Weirsma, 1992). Hence, the general consensus in the literature is that extrinsic rewards erode intrinsic motivation, as long as the reward is not contingent on task performance, is tangible, salient and expected (Dyer &

Parker, 1975; Glass, McGraw & Smith, 1981; Weirsma, 1992).

Extrinsic rewards are most damaging to levels of intrinsic motivation when they are perceived as being controlling and provide no feedback to the individual on their competency (Weirsma, 1992). An example of reward that are non-contingent on task performance levels is commission based pay system. Although an external reward can induce an individual to complete a task, it is still preferable for workers to be driven by intrinsic motivating factors (Benware & Deci, 1984; Reeve, 1992; Rigby, Deci, Patrick, & Ryan, 1992).

Intrinsic motivation has been shown to facilitate high quality learning, deeper conceptual understanding, better retention rates, and greater cognitive flexibility (Benware & Deci, 1984; McGraw & McCullers, 1979). In a study conducted by Pittman, Boggiano and Rubble (1983), they also found that intrinsically motivated individuals who selected harder tasks and persisted on them for longer than those individuals who were extrinsically motivated. In addition, individuals who interact with authorities, socializing agents, or significant others who are more intrinsically motivated and supportive, are more likely to maintain interest in their given task and possess greater self-determination and satisfaction while completing it (Rigby et al., 1992). Therefore, it is favourable to encourage intrinsic motivation and thus self-determination in individuals because it will increase their overall performance on any given task.

Within a work context, there needs to be a conceptual link between work motivation and job performance to provide

workers with regular feedback (Weirisma, 1992). Within the psychological dynamics of double de-motivation process, both the underpaid and overpaid workers are likely to experience a decrease in their intrinsic motivation because they are receiving extrinsic rewards (salaries) that are non-contingent on their performance. Only one study has investigated double de-motivation and intrinsic motivation, and that was a recent laboratory study conducted by Reynolds (1997). In that particular study, Reynolds found that subjects in the underpaid and overpaid groups (experimental groups) who experienced double de-motivation, do also significantly possessed lower intrinsic motivation than those in the control group. However, her findings cannot be *generalised* to field settings, especially in real work situation in understanding work motivation. To date, no study has investigated double de-motivation and intrinsic motivation in workplace.

In Indonesia, one prominent group of worker that is frequently observed to be in an inequitable workplace and are prone to double de-motivation and lower intrinsic motivation are English teachers who are teaching in private English schools. In these schools, it is common to find that expatriate teachers are paid more than their local counterparts who are teaching the same subjects. The difference in salary are usually between 100 to 400 percent which is higher than the percentage observed by other earlier studies in Africa (e.g., MacLachlan & Carr, 1993) and in Australia (e.g., Carr et al., 1996). Such situation creates the *unreasonableness* of the pay differences which according to Carr et al. (1996) defines an ideal context for

investigating double de-motivation hypothesis. So far however, no study has been conducted in Indonesia to investigate double de-motivation in any group of workers, and since the difference in salary is vast, then its effects on intrinsic motivation of teachers seem evident and therefore require empirical investigation.

In line with the foregoing theoretical and literature review, two hypotheses are stipulated in this study. First, in order to replicate double de-motivation hypothesis, it is predicted that teachers who are underpaid and overpaid because of unreasonableness in salary difference will be de-motivated, thus experiencing double de-motivation than those who are equitably paid. Second, it is predicted that teachers experiencing double de-motivation (i.e., those in underpaid and overpaid groups) with knowledge of pay inequity will also experience lower intrinsic motivation than those who are equitably paid.

METHOD

1. Participants

A total of 188 English teachers (98 females and 90 males) volunteered to participate in the study by signing a consent form, after being requested by the Academic Co-ordinators of the respective schools. Those who refused to participate were free to do so without penalty as explained in the consent form. The participants ages ranged from 23 to 51 years, and the mean age of the sample was 32.30 years ($SD = 4.97$). The participants consisted of expatriate teachers ($n = 60$) who are classified as overpaid group, local teachers ($n = 66$), which was the underpaid group, and equitable paid group ($n = 62$)

that included both expatriate and local teachers. Those overpaid group were paid between 30,000 to 60,000 and the underpaid were 15,000 to 20,000 Indonesian Rupiah for an hour of teaching a subject. These figures vary from school to school, but within that range. The expatriate participants are from Australia (41.7 percent), America (33.2 percent), and the rest from Canada, England, New Zealand, and Scotland. The work contracts of both the expatriate and local teachers were for a period of average of 2 years and is renewable based on performance for all these schools. The participants were derived from nine different private English schools in cities of Bandung and Yogyakarta. Out of the nine schools, two schools pay the expatriates and local teachers working at the same level equally. All the participants were fluent in English language and 90 percent have a first degree in English language.

2. Measures

- i) *Pay and job satisfaction*: The pay and job satisfaction scale was developed by Carr et al. (1996) to assess salary level and the degree of job satisfaction (indirect measure of de-motivation). The scale consists of two questions. The first question assess pay level and that is; *Are you paid less, equal, or more than your counterpart doing the same job?* The responses from the participants defined the salary level and they were classified into underpaid, equitable paid, or overpaid groups. The second part includes a self-rating scale which asks the participants on how satisfied they are with their current jobs. The job

satisfaction measure ranged from definitely dissatisfied (-3) to definitely satisfied (+3), with (0) representing neutrality. De-motivation was defined as dissatisfaction with the current job. This was our operational definition of motivation at work (see Carr et al., 1998).

- ii) *Lottery Questionnaire* (LQ; Morse & Weiss, 1955): The LQ was developed by Morse and Weiss (1955), and is used to measure intrinsic motivation. This questionnaire asks people to indicate whether they would continue to work if they win a lottery, after which they could afford to retire comfortably. It has a scoring range from 0 to 10. A score of 10 indicates high intrinsic motivation. A score of 0 means no intrinsic motivation, where as a score of 5 indicated moderate level of intrinsic motivation. Those who would continue to work are taken to be intrinsically rather than extrinsically motivated. The technique has demonstrated both predictive and concurrent validity (Warr, 1982), and has been used widely in cross-cultural context without difficulties (e.g., Harpaz, 1989). In this study, the LQ produced a Cronbach's Alpha of .95.

3. Procedure

The pay and job satisfaction scale and LQ (including other measures not included in this study, see Marai, 2001) were administered to the participants by the Academic Coordinators of these schools, and returned in tightly sealed envelopes. There was no time limit, and the participants were encouraged to complete

the scales at their leisure time during school hours and return as soon as possible. Out of a total of 300 scales distributed, 188 were returned for analysis (a return rate of 62.67 percent). This return rate is consistent with the norm for questionnaire survey method (see, Rosenthal & Rosnow, 1991).

RESULTS

Double de-motivation

In order to establish double de-motivation, the means and standard deviations of the three groups were compared and further analysed by ANOVA to test for specific differences between the groups. In line with the first hypothesis, a post hoc analysis utilising Scheffé method was necessary to explicate the difference between the underpaid, overpaid and equitable paid groups.

The underpaid group mean score was 0.26 ($SD = 1.89$), the overpaid was -0.77 ($SD = 1.23$) and the equitable paid was 1.58 ($SD = 0.78$). The underpaid and overpaid groups were dissatisfied or less satisfied with their current jobs than the equitable paid group. The equitable paid group participants were satisfied with their jobs.

In terms of job satisfaction or de-motivation, the one way ANOVA showed significant variation between the three groups, $F(2, 185) = 43.43$, $p < .001$. Furthermore, there was significant difference between the underpaid and overpaid groups on job satisfaction with mean difference of -1.02 and Standard Error of 0.25 ($p < .001$). A post hoc analysis utilising Scheffé procedure revealed that the underpaid ($M = 0.26$) and overpaid (M

$= -0.77$) groups were significantly less satisfied or de-motivated, thus experiencing double de-motivation than the equitable paid group ($M = 1.58$) with their current jobs ($p < .05$).

Intrinsic motivation and double de-motivation

Similar analysis as above were conducted to delineate the specific difference between the groups in terms of intrinsic motivation measured via LQ in respect to the second hypothesis. The mean score of underpaid was 3 ($SD = 3.27$), overpaid 0.43 ($SD = .87$), and equitable paid 7.95 ($SD = 1.76$). This means that the underpaid and overpaid groups possessed lower levels of intrinsic motivation than the equitable paid group.

For robust analysis in terms of intrinsic motivation, the one way ANOVA revealed a significant variation between groups, $F(2, 185) = 178.21$, $p < .001$. A post hoc analysis employing Scheffé procedure showed that the underpaid ($M = 3$) and overpaid ($M = .43$) groups were significantly lower in their intrinsic motivation than the equitable paid group ($M = 7.95$), $p < .05$. This implies that most of the teachers in the under and over paid groups would not continue to work if they win a lottery that will keep them for their life time, thus signifying lower intrinsic motivation. On the contrary, the equitable paid group would continue to work despite winning such lottery which demonstrated that they have high intrinsic motivation in their present jobs.

In addition, the Pearson correlation analysis was conducted to find out the relationship of LQ with job satisfaction.

The result showed that LQ has a positive correlation with job satisfaction and was significant (1 – tailed), $r = .57$, $p < .001$. This implies that the participants who have lower intrinsic motivation do also experienced lower satisfaction or de-motivation than those participants with higher scores. A further multiple regression analysis revealed that a decrease in job satisfaction or de-motivation was associated with a decrease in intrinsic motivation for the sample as a whole, $\beta = .45$, $t = 6.01$, $p < .001$.

Overall, the above principal results imply that the participants in both underpaid and overpaid groups who possessed lower intrinsic motivation were also the ones experiencing double de-motivation than participants in the equitable paid group.

DISCUSSION

The primary results of this study provide robust empirical evidence for the existence of double de-motivation and intrinsic motivation. Hence, both hypotheses were confirmed. As was first predicted, the results showed that underpaid group of local teachers as well as overpaid group of expatriate teachers were de-motivated, thus resulting in double de-motivation as compared with equitable paid group. In fact, this demonstrates that pay discrepancies of an unreasonable nature can cause double de-motivation among expatriates and local English teachers in private schools in Indonesia. This specific finding of double de-motivation within this particular group of workers provides additional support to its existence in workplace and the result is consistent with

other studies elsewhere (e.g., Carr et al., 1996; MacLachlan & Carr, 1993; McLoughlin & Carr, 1997).

In comparison to Carr et al's (1996) study, specifically quasi-experiment two which consisted of (para) professionals, managers, clerks, salespersons, plant operators, and manual labourers ($N = 126$), the mean score of the underpaid group was 0.04, overpaid group 0.33, and equitable paid group 1.83. In this study, the means were 0.26, - 0.77, and 1.58 for these groups respectively. Although these two studies utilised different methods, that is, quasi-experiment and survey questionnaire, hence, there was not much difference between the means of these studies. This implies that, both findings point in the same direction, and that is, the dissatisfaction of workers with pay differences which is defined as double de-motivation in underpaid and overpaid groups as compared to equitable paid group.

Despite double de-motivation being experienced by the underpaid and overpaid workers, Perry (1993) found in his study that the overpaid group were satisfied with their current job as compared to the underpaid group. Following Carr et al's (1996) explanations, they suggest that two factors were responsible for the difference in the findings. First, they pointed out that the scale of pay differential in Perry's study was 26.4 percent which is less than theirs, and also including this study which is between 100 to 400 percent. Second, Perry did not report the level of *consciousness* of pay inequity, a crucial factor (Manning & Avolio, 1985). Apart from these reasons, Carr et al. (1996) also nicely pointed out

that job satisfaction could be interpreted as beginning of de-motivation.

In regard to hypothesis two as was predicted, the results confirmed and demonstrated that not only the under and over paid teachers experienced double de-motivation, but their intrinsic motivation was found to be significantly at a lower level as compared to teachers who are equitably paid. However, in explaining what factors influence intrinsic and extrinsic motivation are crucial. Many past studies have concluded comprehensively that workers who have high intrinsic motivation relates to internal factors such as job satisfaction than extrinsic ones which include money and other tangible or external benefits (e.g., Dyer & Parker, 1975; Earn, 1982). In fact, such empirical evidence obtained in these studies may seem opposite to the result here, but this is not the case. In this study, the criteria was pay discrepancies in evaluating double de-motivation between teachers which can be viewed as extrinsic in nature, however, pay becomes *secondary* to *unreasonable* explanation for the such a vast difference which is *primary*, thus creating cognitive tensions and negative behavioural responses from the inequitable paid workers. Hence, such cognitive evaluation process resulting in double de-motivation is consistent with Deci's (1975) cognitive evaluation theory on intrinsic motivation.

In order to explain further, the principles of reinforcement which relates to primary and secondary reinforcers provide the mechanics of how behaviour operates in response to certain causes and outcomes when trying to explain human motivation at workplace. For pay in terms of money, it is viewed as extrinsic in nature and may not

seem important to maintain long term motivation at work, however, according to reinforcement principles it serves as secondary reinforcer thus having greater impact on workers intrinsic motivation level than primary reinforcers. Hence, the finding in this research is consistent with reinforcement principles which are also being supported with theory and empirical evidence.

One argument that stands clear when comparing expatriates and host workers is that, Western cultures tend to emphasize the value of individualism as compared to non-Western societies that tend to place the collective good above the self (Markus & Kitayana, 1991; Segall, Dasen, Berry, & Poortinga, 1991). Furthermore, in developing countries usually non-Western, money is perceived as important for supporting their basic needs and the extended family, however, since the level of pay is usually of lower level as compared with developed countries such situation of pay inequity creates ideal ground for de-motivation to take place, thus consequently affecting their intrinsic motivation. For instance, in contrast to Americans, Indians and Indonesians may prefer to allocate resources on the basis of comparative need rather than individual reward (Berman, Murphy-Berman, & Singh, 1985; Hui, Triandis, & Yee, 1991; Marin, 1985). If expatriates earn more than their local counterparts, when the needs of the local workers are often much greater (e.g., having to support an extended family), host workers are very likely to feel that rewards are being allocated unfairly. Such negative affect may heighten their application of the principle of equity, thereby compounding their feelings of de-

motivation (Carr et al., 1996). On the other hand, expatriates working together with host workers do feel guilt and unfairness as studies have shown (e.g., Carr et al., 1996; MacLachlan & Carr, 1993), and thus they are de-motivated too. When workers of both categories are placed in situation of pay inequity, then double de-motivation occurs and directly their intrinsic motivation are also affected.

Clearly the result from this study supported Reynolds's (1997) experimental findings and extend it beyond laboratory setting to field setting. Despite that, contradictory findings were reported in an earlier study by Valenzi and Andrews (1971). In their study, a simple task was introduced and the subjects in both the underpaid and overpaid groups were provided justified explanations for their pay decrease or increase respectively before commencement of the experiment. The results revealed no significant changes in work performance or motivation between the underpaid, overpaid, and control groups simply because there were justifications for increase or decrease in the two experimental groups' payment. Therefore, when employees are given reasonable grounds for different pay structures, they do not perceive a social injustice or experience any cognitive discomfort (Carr et al., 1996). Furthermore, experimental findings derived from Valenzi and Andrews (1971) fall short of being generalised to real life situations (Cook & Campbell, 1979). Ironically, expatriates earn more than 100 to 400 percent of the salary as compared with their local counterparts, so it would be almost impossible to reasonably explain such a larger payment difference (Parry, 1990),

thus as this study and others (e.g., Reynolds, 1997) consistently demonstrated were double de-motivation and lower intrinsic motivation among both groups.

This particular set of findings also extend our understanding of problems encountered in educational domain in terms of students' learning process. That is, teaching English in developing countries for example Indonesia, where English is a second language or not the mother-tongue is difficult and students do struggle to master it. As such, de-motivation among teachers is an additional hindrance to the students' learning process and counter-productive because teachers may not performed to the best of their ability. There is a general agreement in the literature that job dissatisfaction or de-motivation results in high turnover rates, drop in performance and overall productivity, and in general, have negative impacts on workers (Austin & Walster, 1974; Wong, 1996).

The covert significant contribution of this study is that, the findings have shown evidently that effort reward fairness not only maintains motivation, but is ideal for further productive developments of any organisation. For example, recently Janssen's (2000) study which emerged from person-environment theory and social exchange theory tested effort-reward fairness among 170 non-management employees from a food company and found empirically that, a positive relationship between job demands and innovative work behaviour when employees perceived effort-reward fairness rather than under-reward unfairness. This perception can also extend to over-reward unfairness. The implication is that workers who perceive a fair balance of work efforts relative to work

rewards will be motivated to respond to higher job demands with innovative work behaviour, however, in case of perceived under-reward and over-reward unfairness, workers are likely to restrict innovative work behaviours as they believe that innovative efforts are inappropriate and subject to exploitation. In the era of globalisation, there will be robust stimulation of competition among organisations and innovative work behaviour will prove as one crucial factor for their expansion and success. However, preventing double de-motivation and lower intrinsic motivation in the arena of workers of different nationality in inequitable pay situation are essential before any innovative work behaviour can be induced.

Although this study reveals a clear relationship between double de-motivation and intrinsic motivation, however, causality cannot be implied here. The direction of such relationship is unclear and may well be bi-directional. It is suggested that other future studies should employ a quasi-experimental design to account for causality between these variables. Despite this shortcoming, the present results do demonstrate overtly that the underpaid and overpaid groups who experienced double de-motivation do significantly also possessed lower levels of intrinsic motivation.

CONCLUSION

As evident from this study, double de-motivation and intrinsic motivation possess a real threat to inequitable pay structure workplace. On the basis of consonant data obtain in this study and elsewhere (e.g., Carr et al., 1996; McLoughlin & Carr,

1997; Reynolds, 1997), it is recommended that organisations with pay inequity should focus on reducing double de-motivation, and synergistically, increase intrinsic motivation by paying workers equitably. In reality, creating an equitable work environment will certainly improve and maintain workers motivation and productivity at the required optimal level.

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